



PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

SHEILA C. HOLMAN
Director

xx

Mr. Don Keisling
President
Westmoreland Partners, LLC
Roanoke Valley Energy Facility
290 Power Place
Weldon, North Carolina 27890

SUBJECT: Air Quality Permit No. 06964T20
Facility ID: 4200174
Westmoreland Partners, LLC
Roanoke Valley Energy Facility
Weldon, North Carolina
Halifax County
Fee Class: Title V
PSD Status: Major

Dear Mr. Keisling:

In accordance with your completed Air Quality Permit Application for Reopen for Cause for your Title V permit received August 17, 2015, we are forwarding herewith Air Quality Permit No. 06964T20 to Westmoreland Partners, LLC - Roanoke Valley Energy Facility, 290 Power Place, Weldon, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina

Mr. Don Keisling

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27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

The PSD minor source baseline dates for PM₁₀, SO₂, and NO₂, have been triggered for Halifax County. However, this modification (issuance of revised permit in accordance with Reopen for Cause provision) does not affect these triggered pollutants.

This Air Quality Permit shall be effective from xx until March 31, 2018, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Rahul P. Thaker, P.E., QEP, at (919) 707-8740.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

cc: EPA Region 4
Raleigh Regional Office
Central Files

ATTACHMENT to Air Quality Permit No. 06964T20

ID No.	Emission Source Description
IE-13 GACT ZZZZ	firewater pump diesel engine (305 hp)
IE-13T	firewater pump diesel fuel storage tank (400 gallons)
IE-14T	auxiliary generator engine fuel tank (275 gallons)
IE-25	RVP-I flue gas desulfurization system reactor discharges
IE-26	RVP-II flue gas desulfurization system reactor discharges
IE-27	flue gas desulfurization system reactor bin unloading
IE-28	welder/generator (20 hp)
IE-29	welder/generators (8 KW each)
IE-30	portable gas pumps (5.5 hp each)
IE-31	portable diesel pump (40 KW)
IE-32	portable diesel air compressor (80 hp)
IE-33	kerosene space heaters used to heat plant equipment (0.1 - 0.15 million Btu per hour each)
IE-34	kerosene storage tank (150 gallons)
IE-35	gasoline storage tank (250 gallons)
IE-36.1, IE-36.2	two diesel storage tanks (500 gallons each)
IE-37	solvent parts cleaner (35 gallons)
IE-38	inorganic liquid storage tanks used for emergency situations
IE-39	laboratory activities
IE-40	water and wastewater treatment process
IE-41	refrigeration equipment
IE-42	RVP I&II steam turbine lube oil reservoirs and exhaust vents
IE-43	ID/FD fan lube oil tanks (99 gallons each) (RVP I&II
IE-44.1, IE-44.2, IE-44.3	three sulfuric acid storage tanks (325, 4000, and 10,000 gallons each) and associated loading and unloading operations
IE-45	various virgin, used oil, and hydraulic fluid containers (RVP I & II)
IE-46	storage of new and used antifreeze

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit".
3. For additional information regarding the applicability of GACT see the DAQ page titled "The Regulatory Guide for Insignificant Activities/Permits Exempt Activities". The link to this site is as follows:
<http://daq.state.nc.us/permits/insig/>

ATTACHMENT to Air Quality Permit No. 06964T20

The following changes were made to the Westmoreland Partners, LLC - Roanoke Valley Energy Facility, Weldon, NC, Air Quality Permit No. 06964T19:

Old Page No. [Air Permit No. 06964T19T19]	New Page No. [Air Permit No. 06964T20]	Condition No.	Changes
7 13	7 13	Section 2.1 A. Table Section 2.1 B. Table	Remove applicability of CAIR (002D .02403, .02404, and .02405) and replace it with CSAPR (40 CFR Part 97, Subpart AAAAA "TR NOx Annual Trading Program", Subpart BBBBB "TR NOx Ozone Season Trading Program", and Subpart CCCCC "TR SO ₂ Group 1 Trading Program"). Include applicability of 02D .0614 Compliance Assurance Monitoring.
27 33	29 35	Section 2.1 D.4.d. Section 2.2 A.1.e.	Revise the reporting requirements pursuant to 40 CFR 64.9.
36	38	Section 2.4 A., B., and C., and D.	Remove these CAIR (002D .02403, .02404, and .02405) requirements and replace it with CSAPR (40 CFR Part 97, Subpart AAAAA "TR NOx Annual Trading Program", Subpart BBBBB "TR NOx Ozone Season Trading Program", and Subpart CCCCC "TR SO ₂ Group 1 Trading Program").
38	39	Section 3	Update the General Conditions with the latest version.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
06964T20	06964T19	xx	March 31, 2018

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Westmoreland Partners, LLC**
Roanoke Valley Energy Facility
Facility ID: **4200174**

Facility Site Location: **290 Power Place**
City, County, State, Zip: **Weldon, Halifax County, North Carolina 27890**

Mailing Address: **P.O. Box 351**
City, State, Zip: **Weldon, North Carolina 27890**

Application Number: **4200174.15A**
Complete Application Date: **August 17, 2015**

Primary SIC Code: **4911**
Division of Air Quality, **Raleigh Regional Office**
Regional Office Address: **3800 Barrett Drive**
Raleigh, North Carolina 27609

Permit issued this the xx.

William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

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ATTACHMENTS

List of Acronyms

SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices:

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
7, 33, and 37	E-1 NSPS Subpart Da MACT Subpart 5U PSD CAM	pulverized coal / No. 2 fuel oil-fired boiler (141,660 lb/hr coal firing capacity; 1,700 million Btu per hour maximum heat input rate; 1,250,000 pounds steam generating capacity; and 167.1 megawatts net output electrical generating capacity; 1,896 gallons/hr and 256 million Btu/hr No. 2 fuel oil start-up firing capacity)	EC-1A EC-1B EC-1C	low NOx burner system with advanced over-fire air dry lime spray dryer flue gas desulfurization system (5,400 pounds per hour lime injection rate) fabric filter (303,475 square feet of filter area)
20	E-2 NSPS Subpart Dc GAOT Subpart 6J PSD	No. 2 fuel oil-fired start-up boiler (25 million Btu per hour maximum heat input)	EC-2	low NOx burner design
13, 33, and 37	E-15 NSPS Subpart Da MACT Subpart 5U PSD CAM	pulverized coal / No. 2 fuel oil-fired boiler (46,667 lbs/hr coal firing; 560 million Btu per hour maximum heat input rate; 434,300 pounds per hour steam generating capacity; and 45.1 megawatts net output electrical generating capacity; 575 gal/hr & 77.6 mmBtu/hr No. 2 fuel oil start-up firing capacity)	EC-15A EC-15B EC-15C	low NOx burner system with advanced over-fire air & selective non-catalytic reduction circulating fluidized bed dry lime scrubber flue gas desulfurization system (1,972 pounds per hour of lime injection rate) fabric filter (59,282 square feet of filter area)
24	E-23 NSPS Subpart Y PSD	enclosed coal conveying system for units E-1 and E-15	EC-23	chemical binder/water sprays
Coal receiving, handling, and storage operations for boiler (ID No. E-1) consisting of:				
24	E-3.1 NSPS Subpart Y PSD	track hopper for a partially enclosed pull-through, railcar off-loading operation (65 tons maximum capacity)	EC-3	chemical binder/water sprays
24	E-3.2 NSPS Subpart Y PSD	track hopper for a partially enclosed pull-through, railcar off-loading operation (65 tons maximum capacity)	EC-3	chemical binder/water sprays
24	E-3.3	track hopper for a partially	EC-3	chemical binder/water sprays

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	NSPS Subpart Y PSD	enclosed pull-through, railcar off-loading operation (65 tons maximum capacity)		
24	E-3.4 NSPS Subpart Y PSD	track hopper for a partially enclosed pull-through, railcar off-loading operation (65 tons maximum capacity)	EC-3	chemical binder/water sprays
24	E-4.1 NSPS Subpart Y PSD	crusher (inside building) for coal crushing operation (300 tons per hour maximum capacity)	N/A	N/A
24	E-4.2 NSPS Subpart Y PSD	crusher (inside building) for coal crushing operation (300 tons per hour maximum capacity)	N/A	N/A
24	E-5 PSD	a coal stacker tube (1,000 tons per hour capacity) installed on the open short - term coal storage pile	EC-5	chemical binder/water sprays
24	E-24 PSD	Long-term coal storage pile	EC-24	chemical binder/water sprays
24	E-6.1 NSPS Subpart Y PSD CAM	coal storage silo (280 tons storage capacity)	EC-6a.1 EC-6b	fabric filter (84 square feet of filter area) enclosed within boiler/turbine building for control of fugitive emissions
24	E-6.2 NSPS Subpart Y PSD CAM	coal storage silo (280 tons storage capacity)	EC-6a.2 EC-6b	fabric filter (84 square feet of filter area) enclosed within boiler/turbine building for control of fugitive emissions
24	E-6.3 NSPS Subpart Y PSD CAM	coal storage silo (280 tons storage capacity)	EC-6a.3 EC-6b	fabric filter (84 square feet of filter area) enclosed within boiler/turbine building for control of fugitive emissions
24	E-6.4 NSPS Subpart Y PSD CAM	coal storage silo (280 tons storage capacity)	EC-6a.4 EC-6b	fabric filter (84 square feet of filter area) enclosed within boiler/turbine building for control of fugitive emissions
24	E-10 PSD	enclosed coal sampling building operation	NA	NA

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Lime receiving, storage, and recycling operations for boiler (ID No. E-1) consisting of:				
24	E-7 PSD CAM	lime surge bin	EC-7	bagfilter (1,040 square feet of filter area)
24	E-8 PSD CAM	lime recycling bin	EC-8	bagfilter (636 square feet of filter area)
24	E-11 PSD CAM	lime storage silo (400 tons storage capacity)	EC-11	bagfilter (1,767 square feet of filter area)
Flyash/spent lime storage and handling operations for boiler (ID No. E-1) consisting of:				
24	E-12.1 PSD CAM	flyash filter receiver	EC-12.1	bagfilter (1,295 square feet of filter area)
24	E-12.2 PSD CAM	flyash filter receiver	EC-12.2	bagfilter (1,295 square feet of filter area)
24	E-9.1 PSD CAM	flyash storage silo (900 tons storage capacity)	EC-9.1	bagfilter (954 square feet of filter area)
24	E-9.2 PSD CAM	flyash storage silo (900 tons storage capacity)	EC-9.2	bagfilter (954 square feet of filter area)
24	E-9b.1 PSD	flyash/spent lime silo loadout operation	EC-9b.1	enclosed flyash moisture conditioning system with flexible chute and door flaps
24	E-9b.2 PSD	flyash/spent lime silo loadout operation	EC-9b.2	enclosed flyash moisture conditioning system with flexible chute and door flaps
Support equipment consisting of:				
29	T01 PSD	one atmospheric vent installed on one fixed roof No. 2 fuel oil storage tank (35,000 gallon capacity)	NA	NA
29	E-14 GAFT Subpart 4Z	1135 horsepower auxiliary generator engine with 275 gallon No. 2 fuel oil tank	NA	NA
Coal receiving, handling, and storage operations for boiler (ID No. E-15) consisting of:				
24	E-16.1 NSPS Subpart Y PSD	crusher (inside building) for coal crushing operation (150 tons per hour maximum crushing capacity)	N/A	N/A
24	E-16.2 NSPS Subpart Y PSD	crusher (inside building) for coal crushing operation (150 tons per hour maximum crushing capacity)	N/A	N/A

Page	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
24	E-17.1 NSPS Subpart Y PSD CAM	coal storage silo (130 tons storage capacity)	EC-17.1a	fabric filter (84 square feet of filter area)
			EC-17.1b	enclosed within boiler/turbine building for control of fugitive emissions.
24	E-17.2 NSPS Subpart Y PSD CAM	coal storage silo (130 tons storage capacity)	EC-17.2a	fabric filter (84 square feet of filter area)
			EC-17.2b	enclosed within boiler/turbine building for control of fugitive emissions.
24	E-17.3 NSPS Subpart Y PSD CAM	coal storage silo (130 tons storage capacity)	EC-17.3a	fabric filter (84 square feet of filter area)
			EC-17.3b	enclosed within boiler/turbine building for control of fugitive emissions.
	Lime receiving, storage, and recycling operations for boiler (ID No. E-15) consisting of:			
24	E-18 PSD CAM	hydrated lime storage silo	EC-18	fabric filter (1,178 square feet of filter area)
24	E-22 PSD CAM	hydrated lime surge tank	EC-22	fabric filter (630 square feet of filter area)

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

- A. One pulverized coal-fired / No. 2 fuel oil-fired boiler (ID No. E-1) with associated low NO_x burner system with advanced over-fire air (ID No. EC-1A), dry lime spray dryer flue gas desulfurization (FGD) system (ID No. EC-1B), and fabric filter (ID No. EC-1C)**

The following table provides a summary of the limits and standards for emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	0.02 pounds per million Btu heat input	15A NCAC 02D .0530
PM10	0.018 pounds per million Btu heat input	15A NCAC 02D .0530
visible emissions	20 percent opacity (six-minute average, except for one six-minute period per hour of not more than 27 percent opacity)	15A NCAC 02D .0530
sulfur dioxide	0.213 pounds per million Btu heat input and 92 percent sulfur dioxide reduction (30-day rolling average)	15A NCAC 02D .0530
nitrogen oxides	0.33 pounds per million Btu heat input (30-day rolling average)	15A NCAC 02D .0530
carbon monoxide	0.20 pounds per million Btu heat input (24-hour average)	15A NCAC 02D .0530
volatile organic pollutants	0.03 pounds per million Btu heat input	15A NCAC 02D .0530
fluorides	5.38×10^{-4} pounds per million Btu heat input	15A NCAC 02D .0530
particulate matter	0.147 pounds per million Btu heat input	15A NCAC 02D .0503
particulate matter	0.030 pounds per million Btu heat input	15A NCAC 02D .0524 40 CFR Part 60, Subpart Da §60.402Da (a)
sulfur dioxide	Solid fuel: 1.20 pounds per million Btu heat input and 90% reduction , or 0.60 pounds per million Btu heat input and 70% reduction	15A NCAC 02D .0524 40 CFR Part 60, Subpart Da §60.43Da
sulfur dioxide	Liquid or gaseous fuel: 0.80 pounds per million Btu heat input and 90% reduction	

Regulated Pollutant	Limits/Standards	Applicable Regulation
	<p>Firing a combination of fuels: If SO₂ emissions are greater than 0.6 pounds per million Btu input: $Es = [0.80x + 1.20y]/100$ and $\%Ps = 10$</p> <p>If SO₂ emissions are less than 0.6 pounds per million Btu input: $Es = [0.80x + 1.20y]/100$ and $\%Ps = [10x + 30y]/100$</p> <p>Es is the prorated sulfur dioxide emission limit (lb/million Btu input) $\%Ps$ is the percentage of potential sulfur dioxide emission allowed x is the percentage of total heat input derived from the combustion of liquid fuels y is the percentage of total heat input derived from the combustion of solid fuel</p>	
nitrogen oxide	<p>Solid fuel: 0.60 pounds per million Btu heat input</p> <p>Liquid fuel: 0.30 pounds per million Btu heat input</p> <p>Firing a combination of fuels: $En = [0.30x + 0.60z]/100$ En is the applicable standard for nitrogen oxides when multiple fuels are combusted simultaneously (lb/million Btu input) x is the percentage of total heat input derived from the combustion of fuels subject to the 0.30 lb/million Btu limit z is the percentage of total heat input derived from the combustion of fuels subject to the 0.60 lb/million Btu limit</p>	15A NCAC 02D .0524 40 CFR Part 60, Subpart Da, §60.44Da (a)
opacity	20 percent (six-minute average, except for one six-minute period per hour of not more than 27 percent opacity)	15A NCAC 02D .0524 40 CFR Part 60, Subpart Da, §60.402Da(b)
Particulate matter, PM10	See Section 2.2.A.1.	15A NCAC 02D .0614
hazardous air pollutants	See Section 2.2.A.2.	15A NCAC 02D .1111 40 CFR Part 63, Subpart UUUUU
Nitrogen oxide Sulfur dioxide	See Section 2.4	40 CFR Part 97, Subpart AAAAA "TR NOx Annual Trading Program", Subpart BBBB "TR NOx Ozone Season Trading Program", and Subpart CCCCC "TR SO ₂ Group 1 Trading Program". Federal-only requirement

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. Particulate matter emissions from the boiler (**ID No. E-1**) shall not exceed 0.02 pounds per million Btu heat input. [15A NCAC 02D .0530]
- b. PM₁₀ emissions from the boiler (**ID No. E-1**) shall not exceed 0.018 pounds per million Btu heat input. [15A NCAC 02D .0530]
- c. The boiler (**ID No. E-1**) shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity. [15A NCAC 02D .0530]
- d. Sulfur dioxide emissions from the boiler (**ID No. E-1**) shall not exceed 0.213 pounds per million Btu heat input and shall be reduced by 92 percent based on a 30-day rolling average. [15A NCAC 02D .0530]
- e. Nitrogen oxide emissions from the boiler (**ID No. E-1**) shall not exceed 0.33 pounds per million Btu heat input based on a 30-day rolling average. [15A NCAC 02D .0530]
- f. Carbon monoxide emissions from the boiler (**ID No. E-1**) shall not exceed 0.20 pounds per million Btu heat input based on a 24-hour average. [15A NCAC 02D .0530]
- g. Volatile organic pollutants emissions from the boiler (**ID No. E-1**) shall not exceed 0.03 pounds per million Btu heat input. [15A NCAC 02D .0530]
- h. Fluorides emissions from the boiler (**ID No. E-1**) shall not exceed 5.38×10^{-4} pounds per million Btu heat input. [15A NCAC 02D .0530]
- i. Sulfur dioxide emissions from the boiler shall be controlled by a dry lime spray dryer and fabric filter combination having a minimum of 92 percent control efficiency (30-day rolling average). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the control efficiency is less than 92 percent.
- j. Nitrogen oxide (NO_x) emissions from the boiler shall be controlled by low NO_x burners and advanced overfire air systems.

Testing [15A NCAC 02Q .0508 (f)]

- k. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test indicate emissions exceed any limit given in Condition 2.1 A. 1. a. – j. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508 (f)]

- l. Particulate matter and PM₁₀ emissions from the boiler shall be controlled by a fabric filter capable of achieving a 99.92 percent control efficiency. The fabric filter may be bypassed during No. 2 fuel oil firing start-ups to alleviate potential moisture damage to the filter at low start-up temperatures. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include an annual internal inspection of the bagfilters for structural and fabric filter integrity. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the fabric filter is not inspected and maintained.
- m. The results of inspection and maintenance of the fabric filter shall be maintained in a logbook (written or electronic format), kept on site, and made available to an authorized DAQ representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 002D .0530 if these records are not maintained.
- n. The Permittee shall install, operate, and maintain a pressure drop indicator on the fabric filter. The pressure drop across each fabric filter shall not exceed 15 inches of water. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the pressure drop is not maintained within the prescribed limits.
- o. The maximum sulfur content of any coal received and burned in the boiler shall not exceed 1.6 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the coal exceeds this limit.

- p. To assure compliance with the limit in Condition 2.1A.1.o. above, the Permittee shall monitor the sulfur content of the coal by using coal supplier certification per total shipment received. The coal supplier certification shall be recorded in a logbook (written or electronic format) per total shipment and include the following information:
- the name of the coal supplier;
 - the maximum sulfur content of the coal received per total shipment;
 - an annual statement verifying that the methods used to determine the maximum sulfur content of the coal was in accordance with the following:
 - sampling -- ASTM Method D 2234 or D7430;
 - preparation -- ASTM Method D 2013;
 - gross calorific value (Btu) -- ASTM Method D-5865
 - moisture content --ASTM Methods D 3173, D 5142, D 3302 or D2961; and
 - sulfur content -- ASTM Method D 3177 or ASTM Method D 4239
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the coal is not monitored and recorded.
- q. The maximum coal firing capacity of the boiler shall not exceed 141,660 pounds of coal per hour. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if this limit is exceeded.
- r. The firing of No. 2 fuel oil during start-up conditions (period during which the unit is firing exclusively No. 2 fuel oil and bypassing the emission control devices) shall not exceed a maximum of fifteen (15) hours during any one start-up period and a maximum of 750 hours of firing No. 2 fuel oil during any consecutive twelve month period. The hours of operation during start-up conditions (period during which the unit is firing exclusively No. 2 fuel oil and bypassing the emission control devices) shall be recorded in a logbook. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not kept.
- s. The maximum firing of No. 2 fuel oil during start-up conditions shall not exceed 1,816 gallons per hour and 256 million Btu per hour heat input when the FGD system (ID No. EC-1B) is bypassed. As long as the FGD system (ID No. EC-1B) is not bypassed, the maximum firing of No. 2 fuel oil during start-up conditions shall not exceed 1,896 gallons per hour regardless of heat input. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these limits are exceeded.
- t. The maximum sulfur content of any No. 2 fuel oil received and burned in the boiler shall not exceed 0.3 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the fuel oil exceeds this limit.
- u. To assure compliance with the limit in Condition 2.1A.1.t. above, the Permittee shall monitor the sulfur content of the No. 2 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a quarterly basis and include the following information:
- the name of the fuel oil supplier;
 - the maximum sulfur content of the fuel oil received during the quarter;
 - the method used to determine the maximum sulfur content of the fuel oil; and
 - an annual certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 2 fuel oil fired during the period.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the oil is not monitored and recorded.
- v. The No. 2 fuel oil shall not be fired simultaneously with coal during start-ups until all air cleaning devices are operational and combined exhaust gases are directed through the air cleaning systems. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the No. 2 fuel oil is fired simultaneously with coal during start-ups before all air cleaning devices are operational and combined exhaust gases are directed through the air cleaning systems.
- w. The maximum heat input when firing coal shall not exceed 1,700 million Btu per hour. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if this limit is exceeded.
- x. Continuous emission monitors shall be installed on the boiler to measure and record opacity and the concentration of SO₂ (at the inlet to the dry lime spray dryer and at the outlet of the fabric filter), NO_x, and CO₂ or O₂ emitted from the coal boiler. Each continuous emission monitor shall be maintained, located, and calibrated in accordance with approved procedures of 40 CFR 60.13, Appendix B "Performance Specifications" and Appendix F "Quality Assurance Procedures."
- y. The logbooks (in written or electronic form) shall be kept on-site for a minimum of five years from date of recording and be made available to DAQ personnel upon request in accordance with 15A NCAC 02D

.0508(f) and General Condition O found in Section 3.

Reporting [15A NCAC 02Q .0508(f)]

- z. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on any control device.
- aa. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
- bb. The Permittee shall submit written notification at least thirty days prior to the demonstration of continuous monitoring system performance and subsequent notifications.

2. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of fuel that are discharged from this source into the atmosphere shall not exceed 0.147 pounds per million Btu heat input. [15A NCAC 02D .0503(a)]

Testing [15A NCAC 02Q .0508 (f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Condition 2.1 A. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Condition 2.1 A. 1. l, m, n, y, and z. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503 if the emissions exceed the limit in Condition 2.1 A. 2. a. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503 if the required monitoring and recordkeeping are not performed.

3. 15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART Da

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Da, "Standards of Performance for Electric Utility Steam Generating Units," including Subpart A "General Provisions." [15A NCAC 02D .0524]

Emission Limitations [15A NCAC 02D .0524]

- b. **Particulate matter**
 - i. Particulate emissions shall be limited to 0.030 pounds per million Btu heat input [40 CFR Part 60, Subpart Da §60.402Da (a)]
- c. **Sulfur dioxide**
 - i. When firing solid fuel, sulfur dioxide emissions shall be limited to the following:
 - A. 1.2 pounds per million Btu input and 90% reduction;
 - B. 0.60 pounds per million Btu heat input and 70% reduction when emissions are less than 0.60 pounds per million Btu;
 - C. 1.4 pounds per megawatt-hour gross energy; or
 - D. 0.15 pounds per million Btu heat input.[40 CFR Part 60, Subpart Da §60.43Da (a)(1) through (4)]
 - ii. When firing liquid fuel, sulfur dioxide emissions shall be limited to the following:
 - A. 0.80 pounds per million Btu heat input and 90% reduction; or
 - B. 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 0.20 pounds per million Btu heat input.[40 CFR Part 60, Subpart Da §60.43Da (b)(1) and (2)]
 - iii. When firing a combination of fuels, sulfur dioxide emissions shall be limited by the following formulae:

If SO₂ emissions are greater than 0.6 pounds per million Btu input:

$$Es = [0.80x + 1.20y]/100 \text{ and}$$

$$\%Ps = 10$$

If SO₂ emissions are less than 0.6 pounds per million Btu input:

$$Es = [0.80x + 1.20y]/100 \text{ and}$$

$$\%Ps = [10x + 30y]/100$$

Where: Es is the prorated sulfur dioxide emission limit (lb/million Btu input)

%Ps is the percentage of potential sulfur dioxide emission allowed

x is the percentage of total heat input derived from the combustion of liquid fuels

y is the percentage of total heat input derived from the combustion of solid fuel

[40 CFR Part 60, Subpart Da §60.43Da (h)(1) and (2)]

d. **Nitrogen oxides**

- i. When firing solid fuel, nitrogen oxide emissions shall be limited to 0.60 pounds per million Btu heat input [40 CFR Part 60, Subpart Da §60.44Da(a)(1)]
- ii. When firing liquid fuel, nitrogen oxide emissions shall be limited to 0.30 pounds per million Btu heat input [40 CFR Part 60, Subpart Da §60.44Da(a)(1)]
- iii. When firing a combination of fuels, nitrogen oxide emissions shall not be in excess of the rate calculated by the following formula:

$$En = [0.30x + 0.60z]/100$$

Where: En is the applicable standard for nitrogen oxides when multiple fuels are combusted simultaneously (lb/million Btu input)

x is the percentage of total heat input derived from the combustion of fuels subject to the 0.30 lb/million Btu limit

z is the percentage of total heat input derived from the combustion of fuels subject to the 0.60 lb/million Btu limit

[40 CFR Part 60, Subpart Da §60.44Da(a)(2)]

- e. **Opacity** - Each boiler shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR Part 60, Subpart Da §60.402Da(b)]

Compliance provisions [15A NCAC 02Q .0508(f)]

- f. 40 CFR § 60.48Da(a) – The particulate matter emission limit and opacity standard, the sulfur dioxide emission limit, and the nitrogen oxides emission limit apply at all times except during periods of startup, shutdown, or malfunction.
- g. 40 CFR § 60.48Da(b) and (c) – Initial and subsequent performance test requirements.
- h. 40 CFR § 60.48Da(d) – Compliance with the sulfur dioxide emission limit and the nitrogen oxides emission limit shall be determined by calculating the arithmetic average of all hourly emission rates for SO₂ and NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction.
- i. 40 CFR § 60.48Da(e) – Compliance with applicable SO₂ percentage reduction requirements shall be determined based on the average inlet and outlet SO₂ emission rates for the 30 successive boiler operating days.
- j. 40 CFR § 60.48Da(h) – If the Permittee has not obtained the minimum quantity of emission data as required under § 60.49Da(h), compliance with the emission requirements may be determined by the Administrator by following the applicable procedures in Section 7 of Method 19 of appendix A of 40 CFR 60.
- k. 40 CFR § 60.48Da(q) – The Permittee shall monitor the opacity according to the requirements in § 60.49Da(a).
- l. 40 CFR § 60.48Da(m) – Affirmative defense for exceedance of emissions limit during malfunction.

Monitoring [15A NCAC 02Q .0508(f)]

- m. 40 CFR § 60.49Da(a) – The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.
- n. 40 CFR § 60.49Da(b) – The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system.
- o. 40 CFR § 60.49Da(c) – The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxide emissions discharged to the atmosphere and record the output of the system.
- p. 40 CFR § 60.49Da(d) – The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxide emissions are monitored, and record the output of the system.
- q. 40 CFR § 60.49Da(e) – The continuous monitoring systems (CEMS) shall be operated and data recorded during all periods of operation including startup, shutdown, malfunction or emergency conditions, except for CEM breakdowns, repairs, calibration checks, and zero and span adjustments.
- r. 40 CFR § 60.49Da(f) – Emission data shall be obtained for at least 18 hours in at least 22 out of 30 successive boiler operating days, or data shall be supplemented per 40 CFR § 60.49Da(h).
- s. 40 CFR § 60.49Da(g) – Measurement of 1-hour averages.
- t. 40 CFR § 60.49Da(h) – Use of supplemental continuous monitoring system data.
- u. 40 CFR § 60.49Da(i and j) – Methods and procedures to conduct monitoring system performance evaluations and calibration checks.
- v. 40 CFR § 60.49Da(k) – Procedures for determining gross energy output for sources demonstrating compliance with an output-based standard
- w. 40 CFR § 60.49Da (l and m) – Continuous flow monitoring for facilities demonstrating compliance with an output-based standard
- x. 40 CFR § 60.49Da (s) – The Permittee shall prepare a monitoring plan for each monitoring system and submit the plan to the Administrator at least 45 days before commencing certification testing of the monitoring systems.
- y. 40 CFR § 60.49Da(t) – Requirements for CEMS for facilities demonstrating compliance with the output-based emissions limitation
- z. 40 CFR § 60.49Da(w) – The Permittee shall install, certify, operate, and maintain the CEMS as specified in 40 CFR § 60.49Da(w).

Reporting [15A NCAC 02Q .0508(f)]

- aa. 40 CFR § 60.51Da(a) – Performance test data from the performance evaluation of the continuous monitors shall be submitted to the Administrator.
- bb. 40 CFR § 60.51Da(b) – Reporting for sulfur dioxide and nitrogen oxides for each 24-hour period.
- cc. 40 CFR § 60.51Da(c) – Reporting if minimum emission data is not obtained.
- dd. 40 CFR § 60.51Da(d) – Reporting of excess opacity emissions when conducting performance testing using Method 9
- ee. 40 CFR § 60.51Da(e) – Reporting for fuel pretreatment credit.
- ff. 40 CFR § 60.51Da(f) – Reporting if emissions data not available.
- gg. 40 CFR § 60.51Da(h) – Reporting of signed statements.
- hh. 40 CFR § 60.51Da(i) – Reporting of opacity emissions.
- ii. 40 CFR § 60.51Da(j) – Reports shall be submitted to the Administrator every six months.
- jj. 40 CFR § 60.51Da(k) – Electronic reports may be quarterly.

B. One pulverized coal-fired / No. 2 fuel oil-fired boiler (ID No. E-15) with associated low NO_x burner system with advanced over-fire air and selective non-catalytic reduction (ID No. EC-15A), circulating fluidized bed dry lime scrubber FGD system (ID No. EC-15B), and fabric filter (ID No. EC-15C)

The following table provides a summary of the limits and standards for emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	0.02 pounds per million Btu heat input	15A NCAC 02D .0530
PM10	0.018 pounds per million Btu heat input	15A NCAC 02D .0530
visible emissions	20 percent opacity (six-minute average, except for one six-minute period per hour of not more than 27 percent opacity)	15A NCAC 02D .0530
sulfur dioxide	0.187 pounds per million Btu heat input and 93% SO ₂ reduction (30-day rolling average)	15A NCAC 02D .0530
nitrogen oxides	0.17 pounds per million Btu heat input (30-day rolling average)	15A NCAC 02D .0530
carbon monoxide	0.20 pounds per million Btu heat input (24-hour average)	15A NCAC 02D .0530
volatile organic pollutants	0.03 pounds per million Btu heat input	15A NCAC 02D .0530
particulate matter	0.147 pounds per million Btu heat input	15A NCAC 02D .0503
particulate matter	0.030 pounds per million Btu heat input	15A NCAC 02D .0524 40 CFR Part 60, Subpart Da §60.402Da (a)
sulfur dioxide	Solid fuel: 1.20 pounds per million Btu heat input and 90% reduction , or 0.60 pounds per million Btu heat input and 70% reduction	15A NCAC 02D .0524 40 CFR Part 60, Subpart Da §60.43Da
	Liquid or gaseous fuel: 0.80 pounds per million Btu heat input and 90% reduction	
	Firing a combination of fuels: If SO ₂ emissions are greater than 0.6 pounds per million Btu input: $Es = [0.80x + 1.20y]/100$ and $\%Ps = 10$ If SO ₂ emissions are less than 0.6 pounds per million Btu input: $Es = [0.80x + 1.20y]/100$ and $\%Ps = [10x + 30y]/100$	
	Es is the prorated sulfur dioxide emission limit (lb/million Btu input) %Ps is the percentage of potential sulfur dioxide emission allowed x is the percentage of total heat input derived from the combustion of liquid fuels y is the percentage of total heat input derived from the combustion of solid fuel	
nitrogen oxide	Solid fuel: 0.60 pounds per million Btu heat input	15A NCAC 02D .0524 40 CFR Part 60, Subpart Da §60.44Da (a)
	Liquid fuel: 0.30 pounds per million Btu heat input	
	Firing a combination of fuels: $En = [0.30x + 0.60z]/100$	

Regulated Pollutant	Limits/Standards	Applicable Regulation
	<p>En is the applicable standard for nitrogen oxides when multiple fuels are combusted simultaneously (lb/million Btu input)</p> <p>x is the percentage of total heat input derived from the combustion of fuels subject to the 0.30 lb/million Btu limit</p> <p>z is the percentage of total heat input derived from the combustion of fuels subject to the 0.60 lb/million Btu limit</p>	
Opacity	20 percent (six-minute average, except for one six-minute period per hour of not more than 27 percent opacity)	15A NCAC 02D .0524 40 CFR Part 60, Subpart Da §60.402Da (b)
Particulate matter, PM ₁₀	See Section 2.2.A.1.	15A NCAC 02D .0614
hazardous air pollutants	See Section 2.2.A.2.	15A NCAC 02D .1111 40 CFR Part 63, UUUUU
Nitrogen oxide Sulfur dioxide	See Section 2.4	40 CFR Part 97, Subpart AAAAA "TR NO _x Annual Trading Program", Subpart BBBBB "TR NO _x Ozone Season Trading Program", and Subpart CCCCC "TR SO ₂ Group 1 Trading Program". Federal-only requirement

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. Particulate matter emissions from the boiler (**ID No. E-15**) shall not exceed 0.02 pounds per million Btu heat input. [15A NCAC 02D .0530]
- b. PM₁₀ emissions from the boiler (**ID No. E-15**) shall not exceed 0.018 pounds per million Btu heat input. [15A NCAC 02D .0530]
- c. The boiler (**ID No. E-15**) shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity. [15A NCAC 02D .0530]
- d. Sulfur dioxide emissions from the boiler (**ID No. E-15**) shall not exceed 0.187 pounds per million Btu heat input and shall be reduced by 93 percent based on a 30-day rolling average. [15A NCAC 02D .0530]
- e. Nitrogen oxide emissions from the boiler (**ID No. E-15**) shall not exceed 0.17 pounds per million Btu heat input based on a 30-day rolling average. [15A NCAC 02D .0530]
- f. Carbon monoxide emissions from the boiler (**ID No. E-15**) shall not exceed 0.20 pounds per million Btu heat input based on a 24-hour average. [15A NCAC 02D .0530]
- g. Volatile organic pollutants emissions from the boiler (**ID No. E-15**) shall not exceed 0.03 pounds per million Btu heat input. [15A NCAC 02D .0530]

Testing [15A NCAC 02Q .0508 (f)]

- h. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ

found in Section 3. If the results of this test indicate emissions exceed any limit given in Condition 2.1 B. 1. a-g. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508 (f)]

- i. Particulate matter and PM₁₀ emissions from the boiler shall be controlled by a fabric filter capable of achieving a 99.92 percent control efficiency. The fabric filter may be bypassed during No. 2 fuel oil firing start-ups to alleviate potential moisture damage to the filter at low start-up temperatures. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include an annual internal inspection of the bagfilters for structural and fabric filter integrity. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the fabric filter is not inspected and maintained.
- j. The results of inspection and maintenance of the fabric filter shall be maintained in a logbook (written or electronic format), kept on site, and made available to an authorized DAQ representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.
 The Permittee shall be deemed in noncompliance with 15A NCAC 002D .0530 if these records are not maintained.
- k. The Permittee shall install, operate, and maintain a pressure drop indicator on the bagfilter. The pressure drop across each bagfilter shall not exceed 15 inches of water. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the pressure drop is not maintained within the prescribed limits.
- l. Sulfur dioxide emissions from the boiler shall be controlled by a circulating fluidized bed dry lime scrubber and fabric filter combination having a minimum of 93 percent control efficiency (30-day rolling average). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the control efficiency is less than 93 percent.
- m. Nitrogen oxide (NO_x) emissions from the boiler shall be controlled by low NO_x burners, advanced overfire air system, and a selective non-catalytic reduction system (SNCR). These systems shall be designed and constructed to achieve a nitrogen oxides emission rate of 0.17 pounds per million Btu on a 30-day rolling average.
- n. The maximum sulfur content of any coal received and burned in the boiler shall not exceed 1.6 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the coal exceeds this limit.
- o. To assure compliance with the limit in Condition 2.1.B.1.n. above, the Permittee shall monitor the sulfur content of the coal by using coal supplier certification per total shipment received. The coal supplier certification shall be recorded in a logbook (written or electronic format) per total shipment and include the following information:
 - i. the name of the coal supplier;
 - ii. the maximum sulfur content of the coal received per total shipment;
 - iii. an annual statement verifying that the methods used to determine the maximum sulfur content of the coal was in accordance with the following:
 - (A) sampling -- ASTM Method D 2234 or D7430;
 - (B) preparation -- ASTM Method D 2013;
 - (C) gross calorific value (Btu) -- ASTM Method D-5865
 - (D) moisture content -- ASTM Methods D 3173, D 5142, D 3302, or D2961; and
 - (E) sulfur content -- ASTM Method D 3177 or ASTM Method D 4239
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the coal is not monitored and recorded.
- p. The maximum coal firing capacity of the boiler shall not exceed 46,667 pounds of coal per hour. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if this limit is exceeded.
- q. The firing of No. 2 fuel oil during start-up conditions (period during which the unit is firing exclusively No. 2 fuel oil and bypassing the emission control devices) shall not exceed a maximum of fifteen (15) hours

- during any one start-up period and a maximum of 750 hours of firing No. 2 fuel oil during any consecutive twelve month period. The hours of operation during start-up conditions (period during which the unit is firing exclusively No. 2 fuel oil and bypassing the emission control devices) shall be recorded in a logbook. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not kept.
- r. The maximum firing of No. 2 fuel oil during start-up conditions shall not exceed 550 gallons per hour and 77.6 million Btu per hour heat input when the FGD system (ID No. EC-15B) is bypassed. As long as the FGD system (ID No. EC-15B) is not bypassed, the maximum firing of No. 2 fuel oil during start-up conditions shall not exceed 575 gallons per hour regardless of heat input. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these limits are exceeded.
 - s. The maximum sulfur content of any No. 2 fuel oil received and burned in the boiler shall not exceed 0.3 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the fuel oil exceeds this limit.
 - t. To assure compliance with the limit in Condition 2.1.B.1.s. above, the Permittee shall monitor the sulfur content of the No. 2 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a quarterly basis and include the following information:
 - i. the name of the fuel oil supplier;
 - ii. the maximum sulfur content of the fuel oil received during the quarter;
 - iii. the method used to determine the maximum sulfur content of the fuel oil; and
 - iv. an annual certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 2 fuel oil fired during the period.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the oil is not monitored and recorded.
 - u. The No. 2 fuel oil shall not be fired simultaneously with coal during start-ups until all air cleaning devices are operational and combined exhaust gases are directed through the air cleaning systems. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the No. 2 fuel oil is fired simultaneously with coal during start-ups before all air cleaning devices are operational and combined exhaust gases are directed through the air cleaning systems.
 - v. The maximum heat input when firing coal shall not exceed 560 million Btu per hour. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if this limit is exceeded.
 - w. With respect to the SNCR system, the ammonia/urea emission rate shall not exceed 30 parts per million. The Permittee shall maintain records of ammonia/urea injection rates. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the ammonia/urea emission rate is exceeded or if the records are not maintained.
 - x. Continuous emission monitors shall be installed on the boiler to measure and record opacity and the concentration of SO₂ (at the inlet to the dry lime scrubber and at the outlet of the fabric filter), NO_x, and CO₂ or O₂ emitted from the coal boilers. Each continuous emission monitor shall be maintained, located, and calibrated in accordance with approved procedures of 40 CFR 60.13, Appendix B "Performance Specifications" and Appendix F "Quality Assurance Procedures."
 - y. The logbooks (in written or electronic form) shall be kept on-site for a minimum of five years from date of recording and be made available to DAQ personnel upon request in accordance with 15A NCAC 02D .0508(f) and General Condition O found in Section 3.

Reporting [15A NCAC 02Q .0508(f)]

- z. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on any control device.
- aa. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
- bb. The Permittee shall submit written notification at least thirty days prior to the demonstration of continuous monitoring system performance and subsequent notifications.

2. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of fuel that are discharged from this source into the

atmosphere shall not exceed 0.147 pounds per million Btu heat input. [15A NCAC 02D .0503(a)]

Testing [15A NCAC 02Q .0508 (f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Condition 2.1 B. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Condition 2.1 B. 1. i, j, k, y, and z. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503 if the emissions exceed the limit in Condition 2.1 B. 2. a. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503 if the required monitoring and recordkeeping are not performed.

3. 15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART Da

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Da, "Standards of Performance for Electric Utility Steam Generating Units," including Subpart A "General Provisions." [15A NCAC 02D .0524]

Emission Limitations [15A NCAC 02D .0524]

b. Particulate matter

- i. Particulate emissions shall be limited to 0.030 pounds per million Btu heat input [40 CFR Part 60, Subpart Da §60.402Da (a)]

c. Sulfur dioxide

- i. When firing solid fuel, sulfur dioxide emissions shall be limited to the following:
 - A. 1.2 pounds per million Btu input and 90% reduction;
 - B. 0.60 pounds per million Btu heat input and 70% reduction when emissions are less than 0.60 pounds per million Btu;
 - C. 1.4 pounds per megawatt-hour gross energy; or
 - D. 0.15 pounds per million Btu heat input.
 [40 CFR Part 60, Subpart Da §60.43Da (a)(1) through (4)]
- ii. When firing liquid fuel, sulfur dioxide emissions shall be limited to the following:
 - A. 0.80 pounds per million Btu heat input and 90% reduction; or
 - B. 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 0.20 pounds per million Btu heat input.
 [40 CFR Part 60, Subpart Da §60.43Da (b)(1) and (2)]
- iii. When firing a combination of fuels, sulfur dioxide emissions shall be limited by the following formulae:

If SO₂ emissions are greater than 0.6 pounds per million Btu input:

$$\begin{aligned} Es &= [0.80x + 1.20y]/100 \text{ and} \\ \%Ps &= 10 \end{aligned}$$

If SO₂ emissions are less than 0.6 pounds per million Btu input:

$$\begin{aligned} Es &= [0.80x + 1.20y]/100 \text{ and} \\ \%Ps &= [10x + 30y]/100 \end{aligned}$$

Where: Es is the prorated sulfur dioxide emission limit (lb/million Btu input)
 %Ps is the percentage of potential sulfur dioxide emission allowed
 x is the percentage of total heat input derived from the combustion of liquid fuels
 y is the percentage of total heat input derived from the combustion of solid fuel
 [40 CFR Part 60, Subpart Da §60.43Da (h)(1) and (2)]

d. Nitrogen oxides

- i. When firing solid fuel, nitrogen oxide emissions shall be limited to 0.60 pounds per million Btu heat input [40 CFR Part 60, Subpart Da §60.44Da(a)(1)]
- ii. When firing liquid fuel, nitrogen oxide emissions shall be limited to 0.30 pounds per million Btu heat input [40 CFR Part 60, Subpart Da §60.44aD(a)(1)]
- iii. When firing a combination of fuels, nitrogen oxide emissions shall not be in excess of the rate calculated by the following formula:

$$E_n = [0.30x + 0.60z]/100$$

Where: E_n is the applicable standard for nitrogen oxides when multiple fuels are combusted simultaneously (lb/million Btu input)

x is the percentage of total heat input derived from the combustion of fuels subject to the 0.30 lb/million Btu limit

z is the percentage of total heat input derived from the combustion of fuels subject to the 0.60 lb/million Btu limit

[40 CFR Part 60, Subpart Da §60.44Da(a)(2)]

- e. **Opacity** - Each boiler shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR Part 60, Subpart Da §60.402Da(b)]

Compliance provisions [15A NCAC 02Q .0508(f)]

- f. 40 CFR § 60.48Da(a) – The particulate matter emission limit and opacity standard, the sulfur dioxide emission limit, and the nitrogen oxides emission limit apply at all times except during periods of startup, shutdown, or malfunction.
- g. 40 CFR § 60.48Da(b) and (c) – Initial and subsequent performance test requirements.
- h. 40 CFR § 60.48Da(d) – Compliance with the sulfur dioxide emission limit and the nitrogen oxides emission limit shall be determined by calculating the arithmetic average of all hourly emission rates for SO₂ and NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction.
- i. 40 CFR § 60.48Da(e) – Compliance with applicable SO₂ percentage reduction requirements shall be determined based on the average inlet and outlet SO₂ emission rates for the 30 successive boiler operating days.
- j. 40 CFR § 60.48Da(h) – If the Permittee has not obtained the minimum quantity of emission data as required under § 60.49Da(h), compliance with the emission requirements may be determined by the Administrator by following the applicable procedures in Section 7 of Method 19 of appendix A of 40 CFR 60.
- k. 40 CFR § 60.48Da(q) – The Permittee shall monitor the opacity according to the requirements in § 60.49Da(a).
- l. 40 CFR § 60.48Da(m) – Affirmative defense for exceedance of emissions limit during malfunction.

Monitoring [15A NCAC 02Q .0508(f)]

- m. 40 CFR § 60.49Da(a) – The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.
- n. 40 CFR § 60.49Da(b) – The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system.
- o. 40 CFR § 60.49Da(c) – The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxide emissions discharged to the atmosphere and record the output of the system.
- p. 40 CFR § 60.49Da(d) – The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxide emissions are monitored, and record the output of the system.
- q. 40 CFR § 60.49Da(e) – The continuous monitoring systems (CEMs) shall be operated and data recorded

during all periods of operation including startup, shutdown, malfunction or emergency conditions, except for CEM breakdowns, repairs, calibration checks, and zero and span adjustments.

- r. 40 CFR § 60.49Da(f) – Emission data shall be obtained for at least 18 hours in at least 22 out of 30 successive boiler operating days, or data shall be supplemented per 40 CFR § 60.49Da(h).
- s. 40 CFR § 60.49Da(g) – Measurement of 1-hour averages.
- t. 40 CFR § 60.49Da(h) – Use of supplemental continuous monitoring system data.
- u. 40 CFR § 60.49Da(i and j) – Methods and procedures to conduct monitoring system performance evaluations and calibration checks.
- v. 40 CFR § 60.49Da(k) – Procedures for determining gross energy output for sources demonstrating compliance with an output-based standard
- w. 40 CFR § 60.49Da (l and m) – Continuous flow monitoring for facilities demonstrating compliance with an output-based standard
- x. 40 CFR § 60.49Da (s) – The Permittee shall prepare a monitoring plan for each monitoring system and submit the plan to the Administrator at least 45 days before commencing certification testing of the monitoring systems.
- y. 40 CFR § 60.49Da(t) – Requirements for CEMS for facilities demonstrating compliance with the output-based emissions limitation
- z. 40 CFR § 60.49Da(w) – The Permittee shall install, certify, operate, and maintain the CEMS as specified in 40 CFR § 60.49Da(w).

Reporting [15A NCAC 02Q .0508(f)]

- aa. 40 CFR § 60.51Da(a) – Performance test data from the performance evaluation of the continuous monitors shall be submitted to the Administrator.
- bb. 40 CFR § 60.51Da(b) – Reporting for sulfur dioxide and nitrogen oxides for each 24-hour period.
- cc. 40 CFR § 60.51Da(c) – Reporting if minimum emission data is not obtained.
- dd. 40 CFR § 60.51Da(d) – Reporting of excess opacity emissions when conducting performance testing using Method 9
- ee. 40 CFR § 60.51Da(e) – Reporting for fuel pretreatment credit.
- ff. 40 CFR § 60.51Da(f) – Reporting if emissions data not available.
- gg. 40 CFR § 60.51Da(h) – Reporting of signed statements.
- hh. 40 CFR § 60.51Da(i) – Reporting of opacity emissions.
- ii. 40 CFR § 60.51Da(j) – Reports shall be submitted to the Administrator every six months.
- jj. 40 CFR § 60.51Da(k) – Electronic reports may be quarterly.

C. One fuel oil-fired start-up boiler (ID No. E-2)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	0.04 pounds per million Btu heat input	15A NCAC 02D .0530
PM10	0.03 pounds per million Btu heat input	15A NCAC 02D .0530
visible emissions	20 percent opacity (six-minute average, except for one six-minute period per hour of not more than 27 percent opacity)	15A NCAC 02D .0530
sulfur dioxide	0.31 pounds per million Btu heat input (30-day rolling average)	15A NCAC 02D .0530
nitrogen oxides	0.13 pounds per million Btu heat input (30-day rolling average)	15A NCAC 02D .0530
carbon monoxide	0.12 pounds per million Btu heat input (24-hour average)	15A NCAC 02D .0530
volatile organic pollutants	0.041 pounds per million Btu heat input	15A NCAC 02D .0530

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	0.147 pound per million Btu heat input	15A NCAC 02D .0503
sulfur dioxide	fuel oil firing 0.5 percent sulfur content fuel oil	15A NCAC 02D .0524 40 CFR Part 60, Subpart Dc §60.402Dc
Hazardous air pollutants	Work practice standards	15A NCAC 02D .1111, 40 CFR Part 63, Subpart JJJJJ

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. Particulate matter emissions from the boiler (**ID No. E-2**) shall not exceed 0.04 pounds per million Btu heat input. [15A NCAC 02D .0530]
- b. PM₁₀ emissions from the boiler (**ID No. E-2**) shall not exceed 0.03 pounds per million Btu heat input. [15A NCAC 02D .0530]
- c. The boiler (**ID No. E-2**) shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity. [15A NCAC 02D .0530]
- d. Sulfur dioxide emissions from the boiler (**ID No. E-2**) shall not exceed 0.31 pounds per million Btu heat input based on a 30-day rolling average. [15A NCAC 02D .0530]
- e. Nitrogen oxide emissions from the boiler (**ID No. E-2**) shall not exceed 0.13 pounds per million Btu heat input based on a 30-day rolling average. [15A NCAC 02D .0530]
- f. Carbon monoxide emissions from the boiler (**ID No. E-2**) shall not exceed 0.12 pounds per million Btu heat input based on a 24-hour average. [15A NCAC 02D .0530]
- g. Volatile organic pollutants emissions from the boiler (**ID No. E-2**) shall not exceed 0.041 pounds per million Btu heat input. [15A NCAC 02D .0530]

Testing [15A NCAC 02Q .0508 (f)]

- h. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test indicate emissions exceed any limit given in Condition 2.1 C. 1. a. – g. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508 (f)]

- i. Emissions shall be controlled by good combustion techniques and operating practices,
- j. Operation of this boiler (**ID No. E-2**) shall not exceed nine hours during any one start-up period and 1041 hours of operation during any consecutive twelve month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if either of these operating limits are exceeded.
- k. The maximum sulfur content of any No. 2 fuel oil received and burned in the boiler shall not exceed 0.3 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the fuel oil exceeds this limit.
- l. To assure compliance with the limit in Condition 2.1.C.1.k. above, the Permittee shall monitor the sulfur content of the No. 2 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a quarterly basis and include the following information:
 - i. the name of the fuel oil supplier;
 - ii. the maximum sulfur content of the fuel oil received during the quarter;
 - iii. the method used to determine the maximum sulfur content of the fuel oil; and
 - iv. an annual certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 2 fuel oil fired during the period.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the oil is not monitored and recorded.
- m. The maximum heat input shall not exceed 25 million Btu per hour. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the heat input exceeds this limit.

- n. This boiler (**ID No. E-2**) shall not be operated simultaneously when firing coal in the pulverized coal boilers (**ID Nos. E-1 and E-15**) for more than three hours per calendar month. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if this operating limit is exceeded.
- o. The logbooks (in written or electronic form) shall be kept on-site for a minimum of five years from date of recording and be made available to DAQ personnel upon request in accordance with 15A NCAC 02D .0508(f) and General Condition O found in Section 3.

Reporting [15A NCAC 02Q .0508(f)]

- p. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of fuel oil that are discharged from this source into the atmosphere shall not exceed **0.147 pounds per million Btu heat input**. [15A NCAC 02D .0503 (a)]

Testing [15A NCAC 02Q .0508 (f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Condition 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for emissions of particulate matter from this source to assure compliance with this regulation.

3. 15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART Dc

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions." [15A NCAC 02D .0524]

Emission Limitations [15A NCAC 02D .0524]

- b. The maximum sulfur content of any fuel oil received and burned in the boiler shall not exceed 0.5 percent by weight.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Sulfur dioxide emissions shall be monitored as follows:
 - i. Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR § 60.46Dc(e).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if sulfur dioxide emissions are not monitored as described above.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. In addition to recordkeeping required by 40 CFR § 60.48Dc or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired during each day. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall comply with any reporting required by 40 CFR § 60.48Dc and NOTIFY the DAQ in writing.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

For this source (**ID No. E-2**), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart JJJJJ, "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers," including Subpart A "General Provisions."

Compliance Dates (40 CFR 63.11196 and 40 CFR 63.11210(j))

- a. The Permittee shall achieve compliance with the tune-up management practice standard no later than the date specified in 40 CFR 63.11196(a)(1) and achieve compliance with the energy assessment requirement no later than the date specified in 40 CFR 63.11196(a)(3). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these compliance dates are not met.
- b. For existing boilers that have not operated between the effective date of the rule and the compliance dates specified in 40 CFR 63.11196, the Permittee shall complete the initial performance tune-up no later than 30 days after the re-start of the affected boiler. The Permittee shall complete the one-time energy assessment no later than the compliance date specified in 40 CFR 63.11196. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these compliance dates are not met.

Compliance Requirements

- c. As required by 15A NCAC 02D .1111, the Permittee shall comply with the following requirements:
 - i. General Duty Clause (40 CFR 63.11205(a)) – At all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
 - ii. Boiler Tune-up (40 CFR 63.11223)
 - A. The Permittee must conduct performance tune-ups according to 40 CFR 63.11223(b) and keep records as required in §63.11225(c) to demonstrate continuous compliance.
 - B. To demonstrate continuous compliance following the initial boiler tune-up, biennial tune-ups shall be conducted no more than 25 months after the previous tune-up. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within thirty days of startup. The tune-up shall be conducted as required in 40 CFR 63.11223(b)(1) through (7).
 - C. Boilers with an oxygen trim system that maintain an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up must conduct a tune-up of the boiler every 5 years as specified in 40 CFR 63.11223(b)(1) through (7). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The Permittee may delay the burner inspection specified in 40 CFR 63.11223(b)(1) and inspection of the system controlling the air-to-fuel ratio specified in 40 CFR 63.11223(b)(3) until the next scheduled unit shutdown, but the Permittee must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.
 - iii. Energy Assessment (40 CFR 63.11201(b))
 - A. A one-time initial energy assessment is required by the date specified in 40 CFR 63.11196(a)(3). The energy assessment must include the conditions identified in Table 2 of Subpart JJJJJ.
 - B. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in Table 2 of Subpart JJJJJ satisfies the energy assessment requirement.
 - C. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, which includes the affected units, also satisfies the energy assessment requirement.
 - D. The energy assessment must be performed by a qualified energy assessor. Energy assessor approval and qualification requirements are waived in instances where past or amended energy assessments are used to meet the energy assessment requirements.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Notification and Reporting Requirements

- d. In addition to the notification and reporting requirements of the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
 - i. Initial Notification (40 CFR 63.11225(a)(2)) is required no later than January 20, 2014 or within 120 days after the source becomes subject to the standard.

- ii. Notification of Compliance Status (40 CFR 63.11225(a)(4)) is required no later than 120 days after the applicable compliance date specified in 40 CFR 63.11196. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs 40 CFR 63.11225(a)(4)(i) through (v), as applicable, and must be signed by a responsible official.
- iii. Biennial or 5-year Compliance Report (40 CFR 63.11225(b)) A compliance certification report must be prepared by March 1 every other year or every 5-years, as applicable, starting **March 1, 2015**. The compliance certification report must contain the information specified in paragraphs 40 CFR 63.11225(b)(1) through (4) and must be submitted upon request. The report must be submitted by March 15 if the Permittee had any instance described by paragraph (b)(3) of §63.11225. For boilers that are subject only to a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, the Permittee may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of §63.11225. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these notification and reporting requirements are not met.

Recordkeeping Requirements

- e. In addition to any other recordkeeping requirements of the EPA, the Permittee shall maintain the records identified in 40 CFR 63.11225(c). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these recordkeeping requirements are not met.

D. Coal receiving, handing and storage operations consisting of the following:

- Four track hoppers for partially enclosed pull-through, railcar off-loading operations (ID Nos. E-3.1 through E-3.4) with chemical binder/water sprays (ID No. EC-3)
- Two coal crushers (inside building) (ID Nos. E-4.1 and E-4.2)
- One coal stacker tube installed on the open long- term coal storage pile (ID no. E-5) with chemical binder/water sprays (ID No. EC-5)
- Four coal storage silos (ID Nos. E-6.1 through E-6.4) with fabric filters (ID Nos. EC-6a.1 through EC-6a.4) and enclosed within boiler/turbine building (EC-6b)
- Enclosed coal sampling building operations (ID No. E-10)
- Two coal crushers (inside building) (ID Nos. E-16.1 and E-16.2)
- Three coal storage silos (ID Nos. E-17.1 through E-17.3) with fabric filters (ID Nos. EC-17.1 through 17.3)
- Enclosed coal conveying system (ID No. E-23) with chemical binder/water sprays (ID No. EC-23)
- Short term storage pile (ID No. E-24) with chemical binder/water sprays (ID No. EC-24)

Lime receiving, storage, and recycling operations consisting of the following:

- Lime surge bin (ID No. E-7) with bagfilter (ID No. EC-7)
- Lime recycling bin (ID No. E-8) with bagfilter (ID No. EC-8)
- Lime storage silo (ID No. E-11) with bagfilter (ID No. EC-11)
- Hydrated lime storage silo (ID No. E-18) with fabric filter (ID No. EC-18)
- Hydrated lime surge tank (ID No. E-22) with fabric filter (ID No. EC-22)

Flyash/spent lime storage and handling operations consisting of the following:

- Two flyash filter receivers (ID Nos. E-12.1 and E-12.2) with bagfilters (ID Nos. EC-12.1 and 12.2)
- Two flyash storage silos (ID Nos. E-9.1 and E-9.2) with bagfilters (ID Nos. EC-9.1 and EC-9.2)
- Two flyash/spent lime loadout operations (ID Nos. E-9b.1 and E-9b.2) with enclosed moisture conditions systems with flexible chute and door flaps (ID Nos. EC-9b.1 and EC-9b.2)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter, PM10	ID Nos. E-7, E-8, E-9.1, E-9.2, E-11, E-12.1, E-12.2, E-18, and E-22 0.002 grains per standard cubic foot	15A NCAC 02D .0530

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter, PM10	ID Nos. E-6.1, E-6.2, E-6.3, E-6.4 and E-17.1, E-17.2, E-17.3 0.02 grains per standard cubic foot	15A NCAC 02D .0530
particulate matter, PM10	ID No. E-3.1, E-3.2, E-3.3, E-3.4 - partially enclosed, chemical binder/water spray ID No. E-10 - enclosed building, enclosed conveyors ID Nos. E-4.1, E-4.2, E-16.1, and E-16.2 –enclosed building ID No. E-23 - enclosed conveyors, chemical binder/water spray ID No. E-5 - chemical binder/water spray ID No. E-24 - chemical binder ID No. E-9b.1, E-9b.2 -enclosed moisture conditioning system, door flaps and flexible chute	15A NCAC 02D .0530
visible emissions	ID Nos. E-3.1, E-3.2, E-3.3, E-3.4, E-4.1, E-4.2, E-5, E-6.1, E-6.2, E-6.3, E-6.4, E-7, E-8, E-9.1, E-9.2, E-9b.1, E-9b.2, E-10, E-11, E-12.1, E-12.2, E-16.1, E-16.2, E-17.1, E-17.2, E-17.3, E-18, E-22, E-23, and E-24 10 percent opacity	15A NCAC 02D .0530
visible emissions	ID Nos. E-7, E-8, E-9.1 and E-9.2, E-11, E-12.1 and E-12.2, E-18, and E-22 20 percent opacity	15A NCAC 02D .0521
visible emissions	ID Nos. E-3.1, E-3.2, E-3.3, E-3.4, E-4.1, E-4.2, E-6.1, E-6.2, E-6.3, E-6.4, E-16.1, E-16.2, E-17.1, E-17.2, E-17.3, and E-23 20 percent opacity	15A NCAC 02D .0524 40 CFR Part 60, Subpart Y
PM10	Compliance assurance monitoring (CAM)	15A NCAC 02D .0614

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. Particulate matter (PM10) emissions from the equipment (**ID Nos. E-7, E-8, E-9.1, E-9.2, E-11, E-12.1, E-12.2, E-18, and E-22**) shall not exceed 0.002 grains per standard cubic foot. [15A NCAC 02D .0530]
- b. Particulate matter (PM10) emissions from the equipment (**ID Nos. E-6.1, E-6.2, E-6.3, E-6.4 and E-17.1, E-17.2, E-17.3**) shall not exceed 0.02 grains per standard cubic foot. [15A NCAC 02D .0530]
- c. Particulate matter emissions from the equipment (**ID No. E-3.1, E-3.2, E-3.3, E-3.4**) shall be controlled by being partially enclosed in a building and employing chemical binder/water spray. [15A NCAC 02D .0530]
- d. Particulate matter emissions from the equipment (**ID No. E-10**) shall be controlled by being enclosed within a building and employing enclosed conveyors. [15A NCAC 02D .0530]
- e. Particulate matter emissions from the equipment (**ID Nos. E-4.1, E-4.2, E-16.1, E-16.2, and E-23**) shall be controlled by being enclosed in a building, employing enclosed conveyors, and chemical binder/water spray. [15A NCAC 02D .0530]
- f. Particulate matter emissions from the equipment (**ID No. E-5**) shall be controlled by employing chemical binder/water spray. [15A NCAC 02D .0530]
- g. Particulate matter emissions from the equipment (**ID No. E-24**) shall be controlled by employing chemical binder. [15A NCAC 02D .0530]
- h. Particulate matter emissions from the equipment (**ID No. E-9b.1, E-9b.2**) shall be controlled by employing enclosed moisture conditioning system, door flaps and flexible chute. [15A NCAC 02D .0530]
- i. The equipment (**ID Nos. E-3.1, E-3.2, E-3.3, E-3.4, E-4.1, E-4.2, E-5, E-6.1, E-6.2, E-6.3, E-6.4, E-7, E-8, E-9.1, E-9.2, E-9b.1, E-9b.2, E-10, E-11, E-12.1, E-12.2, E-16.1, E-16.2, E-17.1, E-17.2, E-17.3, E-18, E-22, E-23, and E-24**) shall not cause to be discharged into the atmosphere any gases that exhibit greater than 10 percent opacity (six-minute average). [15A NCAC 02D .0530]

- j. Unloading of coal to the short-term storage pile (**ID No. E-5**) shall be via a stacker tube. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if a stacker tube is not used.

Testing [15A NCAC 02D .0508(f)]

- k. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test indicate emissions exceed any limit given in Condition 2.1 D. 1. a, b, and i. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping 15A NCAC 02Q .0508 (f)]

- l. Fugitive dust emissions from the coal receiving, handling, and storage operations (**ID Nos. E-3.1, E-3.2, E-3.3, E-3.4, E-4.1, E-4.2, E-5, E-24, E-6.1, E-6.2, E-6.3, E-6.4, E-10, E-23, E-16.1, E-16.2, E-17.1, E-17.2, E-17.3**) shall be controlled by enclosures and wet suppression with surfactant as necessary. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if enclosures or wet suppression is not used.
- m. The coal crusher and pulverizers (**ID Nos. E-4.1, E-4.2 and E-16.1, E-16.2**) shall be enclosed (inside of building) to prevent fugitive dust emissions. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the crusher and pulverizers are not enclosures.
- n. Coal stockpiles (**ID Nos. E-5 and E-24**) shall be moistened or treated (wet suppression and surfactant) and the stockpile surfaces shall be kept moist or treated at all times to minimize emissions during storage and handling. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the coal piles are not kept moist or treated at all times.
- o. Fugitive dust emissions from the bottom ash and flyash/spent lime loadout operations (**ID Nos. E-9b.1, and E-9b.2**) shall be controlled by mixing the discharge with water. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the discharge is not mixed with water.
- p. Particulate matter emissions from the seven coal storage silos, two lime surge bins, two lime storage silos, one lime recycling bin, two flyash filter receivers, and two flyash storage silos shall be controlled by 16 bagfilters. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual inspection of the system ductwork and material collection units for leaks; and
 - ii. an annual (for each 12 month period following the initial inspection) internal inspection of each bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the ductwork and bagfilters are not inspected and maintained.
- q. The results of the inspections as required under Condition 2.1D.1.p and any maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.
- r. To assure compliance with 2.1.D.1.i, once a day the Permittee shall observe the emission points of these sources (**ID Nos. E-7, E-8, E-9.1 and E-9.2, E-9b.1 and E-9b.2, E-11, E-12.1 and E-12.2, E-18, and E-22**) for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. The Permittee shall establish "normal" for the source in the first 30 days following the effective date of the permit. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. Take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (EPA Method 9) for 12 minutes is below the limit given in Condition 2.1 A.3.a above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0530.

- s. The results of the visible emission monitoring as required under 2.1.D.1.r shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- t. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- u. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. E-7, E-8, E-9.1 and E-9.2, E-9b.1 and E-9b.2, E-11, E-12.1 and E-12.2, E-18, and E-22**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508 (f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Condition 2.1 D.2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Condition 2.1 D. 1.r., s., and t. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if the required monitoring and recordkeeping are not performed.

3. 15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART Y

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart Y, including Subpart A "General Provisions." [15A NCAC 02D .0524]

Emission Limitations [15A NCAC 02D .0524]

- b. The equipment (**ID Nos. E-3.1, E-3.2, E-3.3, E-3.4, E-4.1, E-4.2, E-6.1, E-6.2, E-6.3, E-6.4, E-16.1, E-16.2, E-17.1, E-17.2, E-17.3, and E-23**) shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Condition 2.1 D. 1. k and l. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the emissions exceed the limit in Condition 2.1 D. 3. b. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the required monitoring and recordkeeping are not performed.

4. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

a. Per 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the following.

b. Background**i. Emission Unit(s)**

- A. Four coal storage silos (ID Nos. E-6.1 through E-6.4)
- B. Three coal storage silos (ID Nos. E-17.1 through E-17.3)
- C. Lime surge bin (ID No. E-7)
- D. Lime recycling bin (ID No. E-8)
- E. Lime storage silo (ID No. E-11)
- F. Hydrated lime storage silo (ID No. E-18)
- G. Hydrated lime surge tank (ID No. E-22)
- H. Two flyash filter receivers (ID Nos. E-12.1 and E-12.2)
- I. Two flyash storage silos (ID Nos. E-9.1 and E-9.2)

ii. Applicable Regulation, Emission Limit, and Monitoring Requirements**A. Regulations**

15A NCAC 02D .0530

B. Emission limits

- 1. Particulate matter (PM10) emissions from the equipment (**ID Nos. E-7, E-8, E-9.1, E-9.2, E-11, E-12.1, E-12.2, E-18, and E-22**) shall not exceed 0.002 grains per standard cubic foot.
- 2. Particulate matter (PM10) emissions from the equipment (**ID Nos. E-6.1, E-6.2, E-6.3, E-6.4 and E-17.1, E-17.2, E-17.3**) shall not exceed 0.02 grains per standard cubic foot.

C. Control Technology

Sixteen bagfilters (**ID Nos. EC-6a.1 through EC-6a.4, EC-17.1 through EC-17.3, EC-7, EC-8, EC-9.1, EC-9.2, EC-11, EC-12.1, EC-12.2, EC-18, and EC-22**)

c. **Monitoring Approach.** The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Measure	Indicator
I. Indicator	Visual emissions
Measuring approach	Visible emissions from the fabric filters will be monitored by visual observations and equipment inspections
II. Indicator Range	No visible emissions
III. Performance Criteria	
Data Representativeness	Visual emission inspections at the emission point
QA/QC Practices and Criteria	Operations personnel are properly trained on how to complete the inspections
Monitoring frequency	Visible emission observations will be conducted daily; Visible inspections of the control equipment will be conducted monthly; and Internal integrity inspections of the control equipment will be conducted annually.
Data Collection Procedures	Maintain records of daily visible emission observations and annual

Averaging Period	equipment inspections N/A
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Reporting [15A NCAC 02Q .0508(f) and 40 CFR 64.9]

- d. The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall also include the following information, as applicable:
- i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.
- All instances of deviations for the requirements of this permit must be clearly identified.

E. One Storage Tank (ID No. T01)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
volatile organic compounds	atmospheric vent per API standard 650, 61.2 pounds per year	15A NCAC 02D .0530

1. 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. Volatile organic compounds emissions from the tank (**ID No. T01**) shall not exceed 61.2 pounds per year per API standard 650. [15A NCAC 02D .0530]

Testing [15A NCAC 02Q .0508 (f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test indicate emissions exceed any limit given in Condition 2.1 E. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508 (f)]

- c. No monitoring/recordkeeping/reporting is required for emissions of volatile organic compounds from this source to assure compliance with this regulation.

F. One auxiliary generator engine (ID No. E-14)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
visible emissions	20 percent opacity	15A NCAC 02D .0521
hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)

	(RICE)	
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1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508 (f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Condition 2.1 F. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 15A NCAC 02D .0501(c)(4)(A)]

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of No. 2 fuel oil for this source.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. E-14**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508 (f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Condition 2.1 F. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of No. 2 fuel oil in this source.

3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590(a)(1)(iii)]

- a. For the engine (**ID No. E-14**) the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 002D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

Definitions and Nomenclature

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

Applicability Date [40 CFR 63.6595(a)(1)]

- c. The Permittee shall comply with the applicable requirements no later than **May 3, 2013**.

Notifications [40 CFR 63.6645(a)(5)]

- d. The Permittee has no notification requirements.

General Provisions [40 CFR 63.6665]

- e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ.

Operating and Maintenance Requirements [15A NCAC 02Q .0508(b)]

- f. During periods of startup of the RICE, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6603 and 63.6625(h)]
- g. Except during periods of startup of the RICE, the Permittee shall:
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary
[40 CFR 63.6603]
- h. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Condition 2.1.F.3.i. [40 CFR 63.6603, 63.6625(i)]
- i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Condition 2.1.F.3.g., or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6603]
- j. The Permittee must be in compliance with the emission limitations and operating limitations in this subpart that apply at all times. [40 CFR 63.6605(a)]
- k. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- l. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a)]
- m. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in these conditions, is prohibited. [40 CF 63.6640(f)(1)]
- n. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CF 63.6640(f)(1)(i)]
- o. The Permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(1)(ii)]
- p. The Permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.
 - i. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the

emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level.

- ii. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent.
- iii. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations.
- iv. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

[40 CFR 63.6640(f)(1)(iii)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if Conditions 2.1.F.3. f. through 2.1.F.3.p. are not met.

Monitoring [15A NCAC 02Q .0508(f)]

- q. The Permittee shall install a non-resettable hour meter on the existing emergency stationary RICE engine if one is not already installed. [40 CFR 63.6625(f)]

Recordkeeping [15A NCAC 02Q .0508(f)]

- r. The Permittee shall keep the following:
 - i. A copy of each notification and report that the Permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
 - ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
 - iii. Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
 - iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 2.1.F.3.k, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
 - v. Records of the maintenance conducted on the RICE pursuant to condition 2.1.F.3.l. [40 CFR 63.6655(d) and (e)]
 - vi. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)(2)]
- s. The Permittee shall keep each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a)(b)(c)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if Conditions 2.1.F.3. q. through 2.1.F.3.s. are not met.

Reporting [15A NCAC 02Q .0508(f)]

- t. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6640(b),(e), and 63.6650(f)]
 - i. The summary report shall also include any reporting required under Condition 2.1.F.3.i. as necessary. [40 CFR 63.6603, Table 02D]
The Permittee shall be deemed in noncompliance with the reporting requirements of 15A NCAC 02D .1111

if Condition 2.1.F.3.t is not met.

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions

- A. One pulverized coal / No. 2 fuel oil-fired boiler (ID No. E-1) with associated low NOx burner system with advanced over-fire air (ID No. EC-1A), dry lime spray dryer flue gas desulfurization system (ID No. EC-1B), and fabric filter (ID No. EC-1C)

One pulverized coal / No. 2 fuel oil-fired boiler (ID No. E-15) with associated low NOx burner system with advanced over-fire air and selective non-catalytic reduction (ID No. EC-15A), circulating fluidized bed dry lime scrubber flue gas desulfurization system (ID No. EC-15B), and fabric filter (ID No. EC-15C)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter, PM10	Compliance assurance monitoring (CAM)	15A NCAC 02D .0614
Hazardous air pollutants	40 CFR Part 63, Subpart UUUUU	15A NCAC 02D .1111

1. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

- a. Per 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the following.
- b. **Background**
 - i. Emission Unit(s)
 - A. One pulverized /No. 2 fuel oil – fired boiler (**ID No. E-1**)
 - B. One pulverized /No. 2 fuel oil – fired boiler (**ID No. E-15**)
 - ii. Applicable Regulation, Emission Limit, and Monitoring Requirements
 - A. Regulations
 - 15A NCAC 02D .0503
 - 15A NCAC 02D .0530
 - 15A NCAC 02D .0524
 - B. Emission limits
 1. Particulate matter emissions from the equipment (**ID Nos. E-1 and E-15**) shall not exceed 0.147 pounds per million Btu. [15A NCAC 02D .0503]
 2. Particulate matter emissions from the equipment (**ID Nos. E-1 and E-15**) shall not exceed 0.030 pounds per million Btu
 3. Particulate matter (PM10) emissions from the equipment (**ID Nos. E-1 and E-15**) shall not exceed 0.018 pounds per million Btu. [15A NCAC 02D .0530]
 - C. Control Technology
 - Two bagfilters (**ID Nos. EC-1C and EC-15C**)
- c. **Monitoring Approach.** The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Measure	Indicator
I. Indicator	Visible emissions
Measuring approach	Visible emissions from the fabric filter will be monitored continuously using COM system on each boiler
II. Indicator Range	<p>An excursion is defined as visible emissions in amounts greater than 13 percent opacity (six-minute average) excluding periods of start-up, shutdown or malfunction. Excursions trigger an inspection, corrective action, and a reporting requirement.</p> <p>The QIP threshold is an accumulation of excursions exceeding 1 percent duration of the operating time for a six-month reporting period.</p>
III. Performance Criteria	
Data Representativeness	COMs installed in accordance with 40 CFR, Appendix B, Performance Specification No. 1
QA/QC Practices and Criteria	The COM systems shall be calibrated, maintained and operated according to 40 CFR 60, Appendix B, Performance Specification No.1 and the Quality Assurance and Quality Control Procedures outlined in 40 CFR 60, Appendix F.
Monitoring frequency	Data is collected continuously with COM systems.
Data Collection Procedures	Data from the COM system is collected electronically and maintained on the Data Acquisition and Handling System computer along with information on the operating status of the boilers.
Averaging Period	6-minute average

d. **Justification**

- i. **Background.** The pollutant-specific emission units are two pulverized /No. 2 fuel oil – fired boilers (**ID Nos. E-1 and E-15**). The particulate matter emissions from each boiler are controlled by fabric filters (**ID Nos. EC-1 and EC-15**).
- ii. **Rationale for Selection of Performance Indicators.** Visible emissions were selected as the performance indicator as a surrogate for PM and PM10 because they are a good indicator of the proper operation and maintenance of the filter units. When the filter units are operating properly, there will little or no visible emissions in the exhaust outlet, and any increase in visible emissions indicates reduced performance of the filter units. Therefore, the presence of visible emissions in levels exceeding or equal to 13% is used as a performance indicator.
- iii. **Rationale for Section of Indicator Ranges.** Per operating knowledge of the systems, the facility has selected an indicator range of greater than or equal to 13% opacity, excluding startup, shutdown, or malfunction. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An increase in visible emissions is indicative of an increase in particulate emissions; and a COMs is a well established monitoring technique for these sources.

The selected QIP threshold for fabric filter visible emissions is greater than 1 percent of the operating time in a 6-month reporting period. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.

e. **Reporting** [15A NCAC 02Q .0508(f) and 40 CFR 64.9]

The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall also include the following information, as applicable:

- i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

All instances of deviations for the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .1111, “Maximum Achievable Control Technology” (MACT) as promulgated in 40 CFR 63, Subpart UUUUU—National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units by **April 16, 2015**. [40 CFR 63.9984]

State-Enforceable only

B. Facility-Wide

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable only Odorous emissions must be controlled	15A NCAC 02D .1806

1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility’s boundary.

2.3 - Permit Shield for Non-applicable Requirements

The Permittee is shielded from the following non-applicable requirements [15A NCAC 02Q .0512(a)(1)(B)]:

- A. 40 CFR 63, Subpart DDDDD, “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters,” is not applicable to the facility because the facility is classified as a minor source of HAPs, with potential emissions less than 10 tons per year of each HAP and 25 tons per year of all HAPs combined.
- B. Notwithstanding the requirements of 15A NCAC 02Q .0512(a)(3)(C), this qualifying facility is not subject to 15A NCAC 02Q .0400 (40 CFR 72 (Acid Rain Provisions)) pursuant to the exemption under 40 CFR 72.6(b)(5).

Federal-enforceable only

2.4 - Cross-State Air Pollution Rule (CSAPR) Requirements

For fossil-fuel fired boilers (**ID Nos. E-1 and E-15**), the Permittee shall comply with all applicable requirements in 40 CFR Part 97, Subpart AAAAA "TR NO_x Annual Trading Program", Subpart BBBBB "TR NO_x Ozone Season Trading Program", and Subpart CCCCC "TR SO₂ Group 1 Trading Program".

SECTION 3 - GENERAL CONDITIONS (version 4.0 – 12/17/2015)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(2)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]

The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.

2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]

The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.

3. Minor Permit Modifications [15A NCAC 02Q .0515]

The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.

4. Significant Permit Modifications [15A NCAC 02Q .0516]

The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.

5. Reopening for Cause [15A NCAC 02Q .0517]

The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:

- i. the changes are not a modification under Title I of the Federal Clean Air Act;
- ii. the changes do not cause the allowable emissions under the permit to be exceeded;
- iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
- iv. the Permittee shall attach the notice to the relevant permit.

c. The written notification shall include:

- i. a description of the change;
- ii. the date on which the change will occur;
- iii. any change in emissions; and
- iv. any permit term or condition that is no longer applicable as a result of the change.

- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations

[15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or

5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR § 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -**

FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0200]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D.

If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - (1) Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - (2) Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - (3) Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St., Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permit modifications subject to 45-day review by the federal Environment Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound